

56. (New) A laminate as defined in claim 35, wherein said first areas extend in the cross machine direction of the nonwoven web.

57. (New) A laminate as defined in claim 35, wherein said nonwoven web comprises polymeric fibers, said fibers being thermally bonded together.

58. (New) A laminate as defined in claim 57, wherein said nonwoven web is compressed prior to said fibers being thermally bonded together.

REMARKS

Favorable reconsideration and allowance of this application is requested in view of the amendments provided and the remarks set forth below.

A restriction requirement previously was imposed upon the pending claims. Applicants provisionally elected to prosecute the invention of Group I, corresponding to claims 1-16 and 27-48. Claims 17-26 were cancelled as drawn to a non-elected invention.

In the Office Action, pending claims 1-7, 9-16, and 27-48 were rejected. Claims 1, 27 and 35 were objected to on the basis that there was stated to be no support in the specification for the "at least 1.5 times" limitation. The Examiner is directed to page 19 of the specification which provides, on lines 15-25: "the higher basis weight areas can be from about 1.5 to about 5 times greater than the basis weight of the lower basis weight areas and particularly can be from about 1.5 to about 3 times greater than the lower basis weight areas." Applicant respectfully submits that this language provides substantial and complete support for the limitations in the claims. However, to the extent any rejection still stands, the amendment to the specification is provided above to remove any doubt on this issue. The amendment does not introduce new matter, but merely clarifies the existing teachings of the specification.

Several of the claims were rejected under 35 USC § 102(b) as anticipated by United States Patent No. 5,575,874 to Griesbach, III (hereafter "the Griesbach patent"). Several of the claims also were rejected under 35 USC § 103(a) as unpatentable in light of the Griesbach patent. As now amended, however, it is believed that the claims patentably define over the Griesbach patent.

For example, all of the independent claims are directed to a nonwoven web or to a laminate containing a nonwoven web. The nonwoven web includes a first area (or areas) having a basis weight that is greater than a second area (or areas). As now amended, all of the independent claims require the first area to extend from a first end of the nonwoven web to a second end for providing strength across the web.

The Griesbach patent is directed to a method for making a shaped nonwoven fabric comprising melt-spun continuous polymeric filaments. The filaments are collected on a forming surface containing recesses. The resulting web has an array of surface features resulting in a variance in basis weight and containing projections corresponding to the forming surface recesses. As opposed to the present invention, however, the Griesbach patent does not teach high basis weight areas that extend across the length of the web for providing strength. Instead, Griesbach discloses surrounding the high basis weight areas with low basis weight areas.

For example, in Figure 11 of the Griesbach patent, a liquid permeable liner layer 258 is shown having discrete portions similar to a "bricks and mortar" configuration. As shown, the lower basis weight areas appear as "mortar" surrounding elongated projections 260, which are the higher basis weight areas. Consequently, the Griesbach patent discloses a nonwoven web containing lower basis weight areas that extend across the web, which is opposite the nonwoven

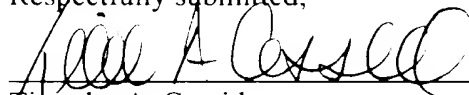
web now being claimed in the present application. As such, it is believed that the claims as now amended patentably define over the Griesbach patent.

Additionally, the Examiner's attention is directed to new claims 51 through 54, 57 and 58. All of these claims require that the nonwoven web of the present invention be thermally bonded. Further, claims 52, 54 and 58 require the web to be compressed, such as in a calendaring operation as shown in the figures. It is respectfully submitted that these claims also contain features not disclosed in the Griesbach patent. For instance, Griesbach teaches bonding together the filaments with an adhesive to integrate the web without the application of bonding pressure in order to preserve the shape of the web.

In summary, it is respectfully submitted that the claims as presently amended meet all of the requirements of 35 U.S.C. § 102 and § 103(a) and are patentably distinct over the prior art of record. Thus, it is submitted that the present application is in complete condition for allowance. Should any issues remain after consideration of the present response, however, Examiner Torres-Velazquez is invited and encouraged to telephone the undersigned to resolve any remaining issues.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully submitted,



Timothy A. Cassidy
Registration No. 38,024

Date: 6/20/2001

DORITY & MANNING, P.A.
700 East North Street, Suite 15
Greenville, SC 29601
(864) 271-1592

JUN 2 1967

desired. The higher basis weight area can be surrounded by a lower basis weight web.

The ratio of higher basis weight areas to lower basis weight areas can also be varied as desired. For most applications, however, the higher basis weight areas should comprise from about 25% to about 75% of the total surface area of the web. More particularly, the higher basis weight areas can comprise from about 40% to about 60% of the web. In one preferred embodiment, 50% of the surface area of the web comprises higher basis weight areas while the remaining 50% of the web comprises lower basis weight areas.

The ratio between the basis weight of the higher basis weight areas and the basis weight of the lower basis weight areas can also vary. In general, the higher basis weight areas can be from about 1.5 to about 5 times greater than the basis weight of the lower basis weight areas and particularly can be from about 1.5 to about 3 times greater than the lower basis weight areas. For almost all applications, the basis weight of the higher basis weight areas and the lower basis weight areas will fall within the range of from about 0.2 ounces per square yard to about 9 ounces per square yard depending upon the particular application.

The differential basis weight nonwoven webs made according to the present invention can be used either alone or in combination with other materials. For instance, the nonwoven webs can be combined with other webs of material to form a laminate. In one embodiment, for example, the nonwoven web of the present invention produced as described above can be combined with other nonwoven webs, woven fabrics, and/or films, such as polymer films. One particular laminate product that may be

at least
1.5 times
greater
than the
second
basis weight
areas;
and
specifically
may be

JUN 25 2001

CLAIM AMENDMENTS

1. (Amended) A nonwoven web made from fibers, said nonwoven web having a first end and a second and opposite end, said nonwoven web defining a first [areas] area having a first basis weight and a second area [areas] having a second basis weight being located on said nonwoven web according to a predetermined pattern, said first basis weight being at least about 1.5 times greater than said second basis weight, said second [areas] area being configured to pass liquids [contacting said areas], said first area [areas] comprising from about 25% to about 75% of said nonwoven web, said first area extending from said first end of said nonwoven web to said second end for providing strength across the web.

2. (Not Amended) A nonwoven web as defined in claim 1, wherein said nonwoven web comprises a spunbond web.

3. (Amended) A nonwoven web as defined in claim 1, wherein said first area [areas] and said second area [areas] form a repeating pattern.

4. (Amended) A nonwoven web as defined in claim 3, wherein said first area [areas] and said second area [areas] comprise alternating columns.

5. (Amended) A nonwoven web as defined in claim 3, wherein said first area [areas surround] surrounds said second [areas] area, said second [areas forming] area comprising discrete shapes.

6. (Amended) A nonwoven web as defined in claim 3, wherein said first area comprises [areas form] alternating rows and alternating columns.

7. (Not Amended) A nonwoven web as defined in claim 2, wherein said fibers comprise polypropylene fibers.

9. (Not Amended) A nonwoven web as defined in claim 1, wherein said first basis weight and said second basis weight are from about 0.2 ounces per square yard to about 9 ounces per square yard.

10. (Not Amended) A nonwoven web as defined in claim 1, wherein said polymeric fibers comprise crimped fibers.

11. (Amended) A nonwoven web as defined in claim 1, wherein said first area comprises [areas comprise] from about 40% to about 60% of said nonwoven web.

12. (Not Amended) A nonwoven web as defined in claim 1, wherein said fibers comprise pulp fibers.

13. (Not Amended) A nonwoven web as defined in claim 1, wherein said fibers comprise polymeric fibers.

14. (Not Amended) A nonwoven web as defined in claim 1, wherein said nonwoven web comprises a meltblown web.

15. (Not Amended) A nonwoven web as defined in claim 1, wherein said nonwoven web comprises an air laid web.

16. (Not Amended) A nonwoven web as defined in claim 13, wherein said polymeric fibers comprise multicomponent fibers.

27. (Amended) A nonwoven web comprising extruded polymeric fibers, said nonwoven web having a first end and a second and opposite end, said nonwoven web defining first areas having a first basis weight and second areas having a second basis weight, said first and second areas being located on said web according to a predetermined pattern, said first basis weight being at least 1.5 times greater than said second basis weight, said first basis weight and said second basis weight ranging from about 0.2 ounces per square yard to about 9 ounces per square

yard, said first areas extending from said first end of said nonwoven web to said second end for providing strength across the web.

28. (Not Amended) A nonwoven web as defined in claim 27, wherein said first basis weight is at least 2 times greater than said second basis weight.

29. (Not Amended) A nonwoven web as defined in claim 27, wherein said polymeric fibers contain a material selected from the group consisting of polypropylene, polyethylene, polyester, nylon, and combinations thereof.

30. (Not Amended) A nonwoven web as defined in claim 27, wherein said polymeric fibers comprise polypropylene.

31. (Not Amended) A nonwoven web as defined in claim 27, wherein said polymeric fibers are crimped.

32. (Not Amended) A nonwoven web as defined in claim 27, wherein said first areas comprise from about 25% to about 75% of said nonwoven web.

33. (Not Amended) A nonwoven web as defined in claim 27, wherein said first areas and said second areas are in alternating columns.

34. (Not Amended) A nonwoven web as defined in claim 27, wherein said web comprises a meltblown web or a spunbond web.

35. (Amended) A laminate comprising:

a first layer comprising a substrate; and

a nonwoven web adhered to said substrate, said nonwoven web having a first end and a second and opposite end, said nonwoven web comprising pulp fibers or polymeric fibers, said nonwoven web defining first areas having a first basis weight and second areas having a second basis weight located on said nonwoven web according to a predetermined pattern, said

first basis weight being [at least 1.5 times] greater than said second basis weight, said first basis weight and said second basis weight ranging from about 0.2 ounces per square yard to about 9 ounces per square yard, said first areas extending from said first end of said nonwoven web to said second end for providing strength across the web.

36. (Not Amended) A laminate as defined in claim 35, wherein said substrate comprises a meltblown web.

37. (Not Amended) A laminate as defined in claim 35, wherein said fibers contained within said nonwoven web comprise polypropylene fibers, and wherein said first areas and said second areas form alternating columns.

38. (Not Amended) A laminate as defined in claim 35, wherein said nonwoven web comprises a spunbond web.

39. (Not Amended) A laminate as defined in claim 38, further comprising a third layer comprising a nonwoven web, said nonwoven web comprising a spunbond web, said first layer being located in between said second layer and said third layer.

40. (Not Amended) A laminate as defined in claim 35, wherein said substrate comprises a polymeric film.

41. (Not Amended) A laminate as defined in claim 35, wherein said first layer comprises a nonwoven web.

42. (Not Amended) A diaper incorporating the laminate defined in claim 35.

43. (Not Amended) A wiper product incorporating the laminate defined in claim 35.

44. (Not Amended) A personal care product incorporating the laminate defined in claim 35.

45. (Not Amended) A laminate as defined in claim 35, wherein said substrate comprises a meltblown web and said nonwoven web comprises a spunbond web.

46. (Not Amended) A laminate as defined in claim 45, wherein said fibers contained within said nonwoven web comprise bicomponent polymeric fibers.

47. (Not Amended) A laminate as defined in claim 46, wherein said bicomponent fibers are crimped.

48. (Not Amended) A laminate as defined in claim 35, wherein said first areas of said nonwoven web surround said second areas, said second areas forming discrete shapes.

49. (New) A nonwoven web as defined in claim 1, wherein said first area extends in the machine direction of the web.

50. (New) A nonwoven web as defined in claim 1, wherein the first area extends in the cross machine direction of the web.

51. (New) A nonwoven web as defined in claim 1, wherein said nonwoven web comprises polymeric fibers, said fibers being thermally bonded together

52. (New) A nonwoven web as defined in claim 51, wherein said nonwoven web is compressed prior to said fibers being thermally bonded together.

53. (New) A nonwoven web as defined in claim 27, wherein said nonwoven web comprises polymeric fibers, said fibers being thermally bonded together.

54. (New) A nonwoven web as defined in claim 53, wherein said nonwoven web is compressed prior to said fibers being thermally bonded together.

55. (New) A laminate as defined in claim 35, wherein said first areas extend in the machine direction of the nonwoven web.

56. (New) A laminate as defined in claim 35, wherein said first areas extend in the cross machine direction of the nonwoven web.

57. (New) A laminate as defined in claim 35, wherein said nonwoven web comprises polymeric fibers, said fibers being thermally bonded together.

58. (New) A laminate as defined in claim 57, wherein said nonwoven web is compressed prior to said fibers being thermally bonded together.